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Enhanced Surveillance of Maternal Mortality in North Carolina

by

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ABSTRACT

Objectives: This study demonstrates serious under-ascertainment of maternal mortality through death certificate reporting alone, and presents selected statistics by cause of death and demographic groups based on an enhanced surveillance method.

Methods: All death records for women ages 10-50 were matched to live birth and fetal death files to identify deaths that occurred within one year after a delivery. Deaths reported as having an underlying or contributing cause of death related to pregnancy were also identified. Hospital discharge data were examined to identify additional deaths with a pregnancy-related discharge diagnosis. All of this information was then reviewed by a maternal-fetal medicine specialist to determine the role that pregnancy played in each death.

Results: Nearly twice as many pregnancy-related deaths are identified from the enhanced surveillance as from death certificates alone. Older women, African-American women, and women of lower educational attainment have substantially higher pregnancy-related death ratios. Homicide and suicide are major causes of death to women during pregnancy and after delivery.

Conclusions: Pregnancy-related mortality is seriously underestimated from death certificates alone. Enhanced surveillance significantly increases ascertainment of maternal deaths from all causes. This information helps improve our understanding of the causes and public health impact of pregnancy-related mortality, and provides a more realistic picture of our progress toward the Healthy People 2010 goal for this indicator.

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